INDEX TO VOLUME XLVII.

A.

Aborigines of America, distinctive characteristics of, 408.
Academy of Natural Sciences of Philadelphia, formation of, 6.
museum and library of, 17.
Actonian prize essay, Fownes's, noticed, 413.
Alger's Phillips' Mineralogy, reviewed, 333.
American Geologists and Naturalists, Association of, proceedings of fifth session, 94.
Prof. H. D. Rogers's address before, 137, 247.
Ammonia, formation of, 193.
salts of, their action upon sulphate of lead, 81.
Anatase, analysis and figure of, 215.
Angelicic acid, discovery of, 196.
Anthracite and plumbago near Worcester, Mass., 214.
Appalachian basin, geological nomenclature of its strata, 154.
Astronomical operations at Pulkova observatory, 88.
Atmosphere, ancient, constitution of, 105.
Atomic weights of simple bodies, 187.

B.

Bailey, J. W., notice of Ehrenberg's researches on microscopic life, 208.
Balmain, M., on combinations analogous to cyanogen, 192.
Baltic, fall of water in, 184.
Beamish, L., on the fall of water in the Baltic and elevation of the Scandinavian coast, 184.
Beaumontite, analysis of, 216.
characters of, 337.
Beck, Dr., note on Graptolites, 372.
L. C., Manual of Chemistry noticed, 414.
Berzelius' annual report for 1843, on the progress of chemistry, extracts from, 187.
Berzelius, festival in honor of, 218.
Bibliographical notices, 198, 408.
Biography of William Maclure, 1.
Birds, coprolites of, 308.
of Crete, Corfu, and the Ionian islands, 186.
Birds' nests, enormous, on the coast of New Holland, 217.
Bleaching of oils, 196.
Bones, fluorine in, 419.
fossil, 116.
composition of, 131.
Borate of lime, hydrous, analysis of, 215.
Boston Society of Natural History, Journal of, noticed, 411.
Brachiopoda, cause of their various size and form, 109.
British Association, proceedings of, 182.

C.

Calcium, atomic weight of, 189.
Calculus, gouty, analysis of, 197.
Calomel, pulverization of, 193.
Calvert, M., on the preparation of quinine, 196.
Caoutchouc, how impermeable to gas, 194.
Carnegie, Capt., on the earthquake of Antigua and Guadaloupe, Feb. 8th, 1843, 182.
Carpinchoe, skull of, 418.
Cerium, atomic weight of, 190.
Chemical equivalents whole numbers, 105.
Chlorine, atomic weight of, 188.
solubility of in water, 191.
Cinchovatine, a new vegetable base, 196.
Clerke, S., observations on volcanoes, 182.
Climate of the United States, &c., 18, 221.
Coal, evaporative power and other properties of, 126.
Cobalt, oxide of, 131.
Coffin, J. H., on the moon's mean motion, 324.
Comet, new, discovery of, 419.
Cook, Capt., account of a bird's nest in New Holland, 218.
Copper, determination of in a solution of a binoxide salt, 193.
native, found in Whately, Mass., 322.
Coprolites of birds, 308.
analysis of, 310.
Corals, composition of, 135.
influence of temperature on their distribution, 123.
Couthouy, J. P., acknowledgment relative to the charge of plagiarism by Mr. Dana, 122.
on the influence of temperature on the development of corals, 123.
Crania Ægyptiaca, Morton's, 205.
Cretaceous strata of New Jersey, 213.
Currents of the sea, causes and effects of, 161.
Cyanogen, combinations analogous to, 192.

D.

Damour, M., analysis of anatase, 215.
Dana, J. D., on the composition of corals, &c., 135.
withdrawal of the charge of plagiarism against Mr. Couthouy, 122.
Deane, J., on the discovery of fossil footmarks, 381.
rejoinder of Prof. Hitchcock to, 390.
surrejoinder to Prof. Hitchcock, 399.
De Candolle's Prodromus, notice of the eighth volume, 198.
Delesse, A., analysis of Beaumontite, 216.
of Sismondine, 217.
characters and analysis of Dipyre, 417.
Dioptase, analysis of, 216.
Dip of the magnetic needle, 84.

Dipyre, characters and analysis of, 417.
Drift, some singular phenomena of, 132.
theories and phenomena of, 264.
Drummond, H. M., on the birds of Crete, Corfu, and the Ionian islands, 186.

E.

Earthquake of Antigua and Guadaloupe, Feb. 8th, 1843, 182.
Earthquakes, phenomena and theory of, 182, 274.
Ehrenberg's researches on the distribution of microscopic life, 208.
Electricity generated by the action of light upon an iodized silver plate, 190.
Endlicher's Mantissa Botanica, 201.
Ethers of the vegetable acids, preparation of, 197.
Ethnography, Morton's Egyptian, 205.
Etna and its Convulsions, announcement of, 100.

F.

Fauntleroy, R. H., on the condition of equilibrium between living and dead forces, 241.
Fielding's Sertum Plantarum noticed, 204.
Fishes of Connecticut, catalogue of, 55.
Flinders, Capt., account of a bird's nest in New Holland, 218.
Fluorine in bones, 419.
Footmarks, fossil, Prof. Hitchcock's report on, 292.
new species, 304.
on the sandstone of Hudson River, 314.
classification of, 317.
Dr. Deane on the discovery of, 381.
Forces, equilibrium between living and dead, 241.
Forry, S., on the climate of the United States, &c., 18, 221.
Fossil footmarks, Prof. Hitchcock's report on, 292.
new species, 304.
on the sandstone of Hudson River, 314.
classification of, 317.
Dr. Deane on the discovery of, 381.
Fossil bones found in South Carolina, 116.
composition of, 131.
mammalia of Great Britain, 186.
Fossils, geographical distribution of, 117.
of the tertiary basin of the Middle Rhine, 183.
in the cretaceous strata of New Jersey, 213.
Fownes's Actonian prize essay noticed, 413.
Franklin, Dr., the discoverer of the Gulf Stream, 162.

G.

Gardner, J., meteorological register at Rio de Janeiro for 1832–43, 290.
Gaultin, M., on the preparation of the ethers of the vegetable acids, 197.
Gauss's theory of terrestrial magnetism, comparison of with observation, 278.
Geology and magnetism, connection between, 101.
Glauberite, characters of, 338.
Glucinium, atomic weight of, 189.
Gold, native, specimens of, 98.
Gouty calculus, analysis of, 197.
Graptolites, generic characters of, 373.
Gray, A., bibliographical notices, 198.
Gulf Stream, theories and phenomena of, 161.

H.

Hadley, E., notice of Rigg's Experimental Researches, 211.
Haldeman, S. S., on the fresh-water Mollusca common to North America and Europe, 99.
Hall, Prof. F., biographical notice of, 139.
Hall, J., on the Brachiopoda and Orthoceratа, 109.
on the geographical distribution of fossils, 117.
Hayes, A. A., analysis of hydrous borate of lime, 215.
of Glauberite, 338.
of Ledererite, 339.
Hayes, J. L., on the geographical distribution and phenomena of volcanoes, 127.
Heat, distribution of, 18, 221.
Heulandite, its identity with Lincolnite, 416.
Himley, M., on a new method of precipitating the sulphurets of metals, 193.
Hincks, W., on the Neottia gemmipara, 185.
Hinds, R. H., Botany of the voyage of H. M. ship Sulphur, 202.
Hippopotamus, supposed new species of, 406.
Hitchcock, E., on the trap tufa or volcanic grit of Connecticut River valley, 103.
on some singular phenomena of drift, 132.
on birds' nests seen by Capts. Cook and Flinders on the coast of New Holland, 217.
report on Ichnolithology or fossil footmarks, 292.
description of several new species, 304.
on the coprolites of birds, 308.
on a supposed footmark on the sandstone of Hudson River, 314.
on native copper, found in Whately, Mass., 322.
on the discovery of yttro-cerite in Massachusetts, 351.
rejoinder to Dr. Deane, 390.
Dr. Deane's surrejoinder, 399.
on the identity of Lincolnite with Heulandite, 416.
Houghton, D., on geological and linear surveys, 115.
Hydrogen, atomic weight of, 188.
Hydrobromic and hydriodic acids, method of obtaining, 192.

I.

Ice, antarctic, 114.
Ichnolites, classification of, 317.
Ichnolithology, Prof. Hitchcock's report on, 292.
Interest, new method for computing, 51.
Iron ores, apparatus and processes for their reduction, 106.

J.

Jackson, C. T., analysis of Beaumontite, 337.
of yttro-cerite, 353.
formula of pink Scapolite, 418.
Johnson, W. R., on the evaporative power and other properties of coal, 126.
Jussieu's Cours Elémentaire de Botanique, 204.

K.

King, H., on the geology of the valley of the Mississippi, 128.
Kunth's Enumeratio Plantarum noticed, 200.

L.

Lanthanium, atomic weight of, 190.
Lea, I., observations on the Naiades, 104.
on fossil Brachiopoda, 109.
Lead regions of the Upper Mississippi, 106.
sulphate of, action of some alkaline salts upon, 81.
singular crystals of, from Rossie, N. Y. 417.
Ledererite, description of, 339.
Lepidoptera, method of preserving, 131.
Light, colored, its influence upon plants, 194.
its action upon an iodized silver plate productive of electricity, 190.
Lime, hydrous borate of, 215.
Lincolnite, its identity with Heulandite, 416.
Linsley, J. H., catalogue of the fishes of Connecticut, 55.
Link, H. F., Anatomia Plantarum Iconibus Illustrata, 205.
Locke, J., on the connection between geology and magnetism, 101.
on the lead regions of the Upper Mississippi, 106.
Loomis, E., on terrestrial magnetism, 278.
Lyell, C., on the cretaceous strata of New Jersey, &c., 213.
on plumbago and anthracite near Worcester, Mass., 214.

M.

Maclure, William, memoir of, 1.
list of his published works, 16.
Magnetic needle, dip of, 84.
Magnetism and geology, connection between, 101.
terrestrial, comparison of Gauss's theory with observation, 278.
Mammalia, fossil, of Great Britain, 186.
Manganese and zinc in solution, separation of, 194.
Mantell, G. A., on the Unionidæ of the country of the Iguanodon, 402.
Marcet, M., on the boiling point of water, 190.
Marchand, M., analysis of gouty calculus, 197.
Mather, W. W., on the sedimentary rocks of the United States, 95.
Maury, M. F., on the Gulf Stream and currents of the sea, 161.
Meteorite, mucilaginous, analysis of, 197.
Meteorological register at Rio de Janeiro for 1832–43, 290.
Microscopic life, Ehrenberg's researches on, 208.
Millon, M., on the solvent power of nitric acid upon metals, 191.
method of obtaining hydrobromic and hydriodic acids, 192.
Mississippi valley, geology of, 128.
Mollusca, fresh-water, common to North America and Europe, 99.
Moon's mean motion, secular acceleration of, 324.
Morton, S. G., memoir of William Maclure, 1.
Crania Ægyptiaca noticed, 205.
on a supposed new species of Hippopotamus, 406.
Inquiry into the distinctive characteristics of the aboriginal race of America, noticed, 408.
Mucilaginous meteorite, analysis of, 197.
Mulder, M., on mucilaginous meteorite, 197.
Murchison, R. I., on the fossils of the tertiary basin of the Middle Rhine, 183.
remarks on Graptolites, 371.

N.

Naiades, observations on, 104.
Needle, magnetic, dip of, 84.
Neottia gemmipara, 185.
New York Geological Reports reviewed, 354.
Nicollet, J. N., biographical notice of, 139.
Nitric acid, its solvent power upon metals, 191.
Nomenclature of the palæozoic strata of the Appalachian basin, 154.
Nooney, J., on the astronomical operations at Pulkova observatory, 88.

O.

Oils, bleaching of, 196.
volatile, adulteration of with alcohol, 197.
Opianic acid, discovery of, 196.
Ornithoidichnites Redfieldii, a new species, 304.
gracillimus, 305.
Danæ, 306.
Orthocerata, peculiarity of their structure, 109.
Owen, D. D., review of New York Geological Reports, 354.
Owen, Prof., report on the fossil mammalia of Great Britain, 186.

P.

Page, C. G., mode of preserving the Lepidoptera, 131.
Palæozoic strata, nomenclature of, 154.
Payen, M., on the bleaching of oils, 196.
Pelouze, M., on the atomic weights of simple bodies, 188.
on the solubility of chlorine in water, 191.
Pennine, analysis of, 216.
Perkins, G. R., on a new method for computing interest, 51.
Perry, T. H., on the dip of the magnetic needle, 84.
Phillips' Mineralogy, Alger's edition, reviewed, 333.

Plants, influence of colored light upon, 194.
experiments upon their inorganic elements, 194.
Plumbago and anthracite near Worcester, Mass., 214.
Polariscope, natural, of tourmaline and mica, 418.
Polstorff, M., experiments upon the inorganic elements of plants, 194.
Polygons, measurement of, 380.
Potassium, atomic weight of, 189.
Pulkova observatory, astronomical operations at, 88.
Pyrrhite, description of, 340.
blowpipe characters of, 418.

Q.

Quinine, preparation of, 196.
Quinoline, production of, 196.

R.

Redfield, W. C., on some phenomena of the diluvial period, 120.
Rich, E., project for reforming the English alphabet and orthography, 420.
Rigg's Chemical and Agricultural Experimental Researches noticed, 211.
Rio de Janeiro, meteorological register at, for 1832–43, 290.
Rogers, H. D., address before the Association of American Geologists and Naturalists, 137, 247.
on the constitution of the earth's ancient atmosphere, 105.
Rogers, R. E., apparatus for the reduction of iron ores, 106.
Rogers, W. B., on chemical equivalents, 105.
Rowles, M., on the evaporation of water under electrical insulation, 190.

S.

Salts, alkaline, action of on sulphate of lead, 81.
Sauroidichnites abnormis, a new species, 307.
Scandinavian coast, elevation of, 184.
Scapolite, pink, formula of, 418.
Sedimentary rocks of the United States, 95.
Shepard's Treatise on Mineralogy reviewed, 346.
Silliman, B., Jr., on the intrusive trap of the new red sandstone of Connecticut, 107.
on a natural polariscope, 418.
Silver, atomic weight of, 189.
Sismondine, a new mineral, 217.
Smith, D. B., Principles of Chemistry noticed, 414.
Smith, H. L., discovery of a new comet, 419.
Smith, J. L., on the action of some alkaline salts upon sulphate of lead, 81.
on fossil bones, 116, 131.
on oxide of cobalt, 131.
notice of Berzelius's Annual Report for 1843, 187.
Soubeiran, M., on the pulverization of calomel, 193.
Succinic acid, production of, 196.
Sulphur acid, new, 191.
Sulphurets of metals, new method of precipitating, 193.
Sulphuric acid, tension of, 191.

T.

Talc from Chamouni, analysis of, 216.
Temperature, laws and phenomena of, 19 *et seq.*
influence on vegetable geography, 221.
Terraced banks of Connecticut River, 98.
Teschemacher, J. E., on singular crystals of lead from Rossie, N. Y., 417.
on the blowpipe characters of Pyrrhite, 418.
Ticknor, G., letter of Baron von Waltershausen to, 100.
Trap, intrusive, of the new red sandstone of Connecticut, 107.
Trap tufa of Connecticut River valley, 103.
Troglodytes niger, characters and habits of, 411.

U.

Unionidæ of the country of the Iguanodon, 402.
Unio Valdensis, description of, 403.
Uranium, atomic weight of, 189.

V.

Volcanoes, geographical distribution and phenomena of, 127.
of Vesuvius and the Solfatara, 182.
Volney, M., his theories of temperature, 232.

W.

Walpers' Repertorium Botanices Systematicæ, 209.
Waltershausen, Baron von, letter respecting his "Etna and its Convulsions," 100.
Water, boiling point in different vessels, 190.
evaporation of under electrical insulation, 190.
solubility of chlorine in, 191.
Webber, S., on the alluvial banks of Connecticut River, 98.
Webster, N., his opinions on temperature, 228.
Weights, atomic, of simple bodies, 187.
Whitlock, G. C., on the measure of polygons, 380.
Weigmann, M., experiments upon the inorganic elements of plants, 194.
Wilkes, C., on the formation of antarctic ice, 114.
Winds, direction of, 40.
Winthrop, J., catalogue of objects of natural history, 282.

Y.

Yttro-cerite, discovery of in Massachusetts, 351.
analysis of, 353.

Z.

Zinc and manganese in solution, separation of, 194.